

# Human IL-12B/p40/NKSF2 Protein

Cat. No. P40-HM112

## Description

<b>Source</b>	Recombinant Human IL-12B/p40/NKSF2 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ile23-Ser328.
<b>Accession</b>	P29460
<b>Molecular Weight</b>	The protein has a predicted MW of 35.8 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin (IL)12B, which encodes the p40 subunit common to IL12 and IL23, as one of the genes for which expression in fibroblastlike synoviocytes from patients with rheumatoid arthritis (RAFLS) is induced by DcR3. Decoy receptor 3 (DcR3) competitively binds to three ligands, Fas ligand, lymphotoxinrelated inducible ligand that competes for glycoprotein D binding to herpesvirus entry mediator on T cells and tumor necrosis factorlike ligand 1A (TL1A), to prevent their effects. Recent studies have suggested that DcR3 directly affects cells as a ligand.

## Assay Data

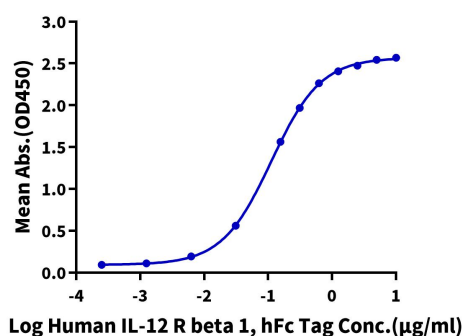
### Bis-Tris PAGE



Human IL-12B on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

**Human IL-12B, His Tag ELISA**  
0.5 $\mu\text{g}$  Human IL-12B, His Tag Per Well



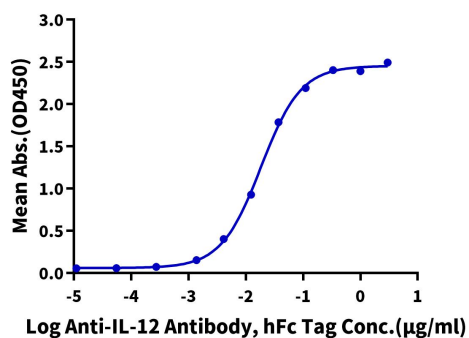
Immobilized Human IL-12B, His Tag at 5 $\mu\text{g}/\text{ml}$  (100 $\mu\text{l}/\text{well}$ ) on the plate. Dose response curve for Human IL-12 R beta 1, hFc Tag with the EC50 of 0.11 $\mu\text{g}/\text{ml}$  determined by ELISA (QC Test).

## Assay Data

## ELISA Data

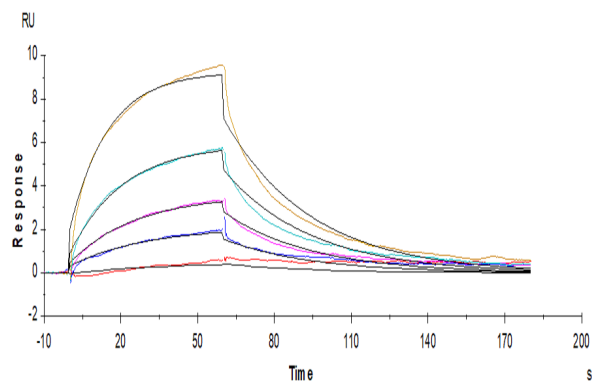
## Human IL-12B, His Tag ELISA

0.1µg Human IL-12B, His Tag Per Well



Immobilized Human IL-12B, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-IL-12 Antibody, hFc Tag with the EC50 of 18.5ng/ml determined by ELISA.

## SPR Data



Human IL-12B, His Tag immobilized on CM5 Chip can bind Human IL-12 R beta 1, His Tag with an affinity constant of 98.1nM as determined in a SPR assay (Biacore T200).